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AVAGO TECHNOLOGIES, LTD.
P.O. Box 1920
Denver, Colorado 80201-1920

ATTORNEY DOCKET NO. 10010392-1



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Mark D. Montierth et al.

Serial No.: 09/903,201

Examiner: Lucas Divine

Filing Date: July 10, 2001

Group Art Unit: 2624

Title: POINT-OF-SALE DEMONSTRATION OF COMPUTER PERIPHERALS

COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria VA 22313-1450

TRANSMITTAL OF REPLY BRIEF

Sir:

Transmitted herewith is the Reply Brief with respect to the Examiner's Answer mailed on December 29, 2005. This Reply Brief is being filed pursuant to 37 CFR 1.193(b) within two months of the date of the Examiner's Answer.

(Note: Extensions of time are not allowed under 37 CFR 1.136(a))

(Note: Failure to file a Reply Brief will result in dismissal of the Appeal as to the claims made subject to an expressly stated new grounds of rejection.)

No fee is required for filing of this Reply Brief.

If any fees are required please charge Deposit Account 50-3718.

Respectfully submitted,

Mark D. Montierth et al.

By

David T. Millers

David T. Millers
Attorney/Agent for Applicant(s)

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellants: Mark D. Montierth, Richard D. Taylor, and Gary Zimmerman
Assignee: Avago Technologies, Ltd.
Title: Point-of-Sale Demonstration of Computer Peripherals
Serial No.: 09/903,201 Filing Date: July 10, 2001
Examiner: Lucas Divine Group Art Unit: 2624
Docket No.: 10010392-1

San Jose, California
February 28, 2006

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P.O. Box 1450
Alexandria, VA 22313-1450

REPLY BRIEF

Dear Sir:

This Reply Brief, which is being filed within two months of the Examiner's
Answer dated December 29, 2005, includes:

- This identification page;
- A statement of the Status of Claims;
- A statement of the Grounds of Rejection to be reviewed; and
- Remarks and Arguments.

THE PATENT LAW OFFICES
OF DAVID MILLERS
6560 ASHFIELD COURT
SAN JOSE, CA 95120
PH: (408) 927-6700
FX: (408) 927-6701

STATUS OF CLAIMS

As set forth in the Appeal Brief dated October 31, 2005, claims 1-15 are pending in the application and all stand rejected.

THE PATENT LAW OFFICES
OF DAVID MILLERS
6560 ASHFIELD COURT
SAN JOSE, CA 95120
PH: (408) 927-6700
FX: (408) 927-6701

GROUND OF REJECTION TO BE REVIEWED

The following issues have been presented to the Board of Appeals for decision:

- A. Whether Claims 1-6 and 10-15 are unpatentable under 35 U.S.C. 103(a) over U.S. Pat. No. 6,753,903 (hereinafter Lin) in view of U.S. Pat. No. 6,747,752 (hereinafter Farago).
- B. Whether Claims 7-9 are unpatentable under 35 U.S.C. 103(a) over Lin in view of Farago and further in view of U.S. Pat. No. 5,872,945 (hereinafter Wett).

ARGUMENTS

This Reply Brief is being submitted in the above-identified patent application pursuant to 37 C.F.R. § 41.41 and in reply to the Examiner's Answer dated December 29, 2005.

I. Change of the Real Party in Interest

Appellants wish to bring to the Board's attention that since the filing of the Appeal Brief on October 31, 2005, the application under appeal has been assigned to Avago Technologies, Ltd., and therefore Avago Technologies, Ltd. is now the real party in interest.

II.) Arguments

A. Under 35 U.S.C. § 103(a), Claims 1-6 and 10-15 are patentable over Lin in view of Farago.

As set forth in Appellant's Appeal Brief dated October 31, 2006, the rejection of claims 1-6 and 10-15 under 35 U.S.C. § 103(a) is improper because:

- 1.) Independent claim 1 distinguishes over the combination of Lin and Farago at least by reciting, "a controller of a type employed in the cable that connects the peripheral to the host computer during normal operation"; and
- 2.) The combination of Lin and Farago would not have been obvious to one of ordinary skill in the art at the time the invention was made because Lin is not analogous art that one of skill in the art would look to as being related to a demonstration system.

1.) Independent claim 1 and 11 distinguish over the combination of Lin and Farago

The Examiner's Answer cites controller 11 as discussed in column 3, lines 7-20 of Lin as being "a controller of a type employed in the cable that connects the peripheral to the host computer during normal operation." However, Fig. 1 of Lin shows controller 11 in an adapter system 1 that Lin teaches as a replacement for a personal computer. For example, Lin beginning at column 2, line 37 states, "According to the present invention, an adaptor for a direct USB (Universal Serial Bus) data transmission between a USB digital still camera and a USB color printer can indeed be a money-saving alternative to a PC (Personal Computer)." Adapter system 1, which includes controller 11, can be used

between two peripherals, i.e., USB digital still camera 2 and USB printer 3 as shown in Fig. 1 of Lin, but the combination of Lin and Farago fails to teach or suggest using controller 11 in a cable that connects a host computer to a peripheral.

Appellants' Appeal Brief noted the interpretation of the cameras in Lin as corresponding to or suggesting a host computer as recited in claim 1 was an error. The Examiner's Answer in support of the interpretation noted that the Examiner should give the claims their broadest reasonable interpretation in light of the supporting disclosure, and the Examiner's Answer then cited portions of Appellants' specification relating to a host computer. See the Examiner's Answer beginning at page 10, line 19.

In interpreting Applicants' specification, the first bullet point on the bottom of page 10 of the Examiner's Answer noted, "'Host computer' is represented by box 110 in Fig. 1 and has a USB connector for connecting to a peripheral." The Examiner's Answer then concluded "Fig. 1 of Lin shows the same thing for the digital still camera [DSC] 2 connecting through a cable to a USB printer 3." The Examiner's statement is imprecise because Lin describes adaptor 1 (not DSC 2) as functioning as the host under the USB platform and describes the connection of USB cables printer 3, adapter 1, and camera 2. In particular, Lin beginning at column 2, line 56 states,

"Since the adaptor 1 is functioning as a host under the USB platform, the connector of the USB cable 4 adjoining the USB-DSC port 14 is a Type-A connector, and the connector of the USB cable 4 adjoining the USB-DSC 2 is a Type-B connector. Similarly, a USB printer port 15 of the adaptor 1 is in connection with the USB printer 3; the coupling between USB printer port 15 and USB printer 3 is a USB cable 5. Since the adaptor 1 is functioning as a host under the USB platform, the connector of the USB cable 5 adjoining the USB printer port 15 is a Type-A connector, and the connector of the USB cable 5 adjoining the USB printer 3 is a Type-B connector."

Accordingly, in this specific example, the Examiner's Answer actually points out differences between a host computer and a digital camera as taught by Lin, particularly in that adapter 1, not camera 2, acts as host.

The further bullet points continuing from the bottom of page 10 to the top of page 11 of the Examiner's Answer indicate functions of a host computer as described in Appellants' specification that may also apply to the digital camera of Lin. On page 11, the Examiner's Answer further indicates, "if only deriving an interpretation from the claim, the 'host computer' has one claimed function, to connect to a cable (which Lin shows in Fig. 1)." Appellants note that claim 1 does not recite a means-plus-function limitation, and the rejection gives no indication of application of the Doctrine of Equivalents or the so-called triple identity test of the same or substantially the same (a) function, (b) way, and

(c) result as set forth in *Graver Tank & Manufacturing Co. v. Linde Air Products Co.*, 339 U.S. 605 (1950). Appellants submit that the Examiner's analysis regarding the similar function misses the objective of claim interpretation.

"The objective of claim interpretation is to discern the meaning of the claim terms to one of ordinary skill in the art at the time of invention." See *Cybor Corp. v. FAS Tech., Inc.*, 138 F.3d 1448, 46 USPQ2d 1169 (Fed. Cir. 1998). Appellants submit that one of ordinary skill in the art at the time the invention was made would not interpret "host computer" as recited in claim 1 as including the digital camera of Lin. Lin provides support for this conclusion. For example, Lin beginning at column 1, line 24 states,

there has been a number of computer peripheral devices supporting the USB standard on the market, such as monitors, keyboards, mice, joysticks, scanners, printers, digital cameras, etc. ... Conventionally, when a high quality digital image is taken by a digital still camera ..., the image data is first processed through a personal computer ..., and then sent to a color printer for printing. In other words, the personal computer is a required interfacing adaptor between a DSC and a printer.

Lin thus indicates that one of skill in the art would categorize a digital camera as a peripheral, not as a host computer such as a PC that connects to peripherals.

In discussing the meaning of "host computer," the Examiner's Answer beginning at line 11 of page 11 states, "to one of ordinary skill in the art, Appellee submits that a host computer would be recognized as any computing device that performs host-like functions." The Examiner's Answer then identifies the functions of a digital camera that are similar to those of a host computer as being "host-like" and concludes "the DSC of Lin is a computing device that performs the host-like functions." Appellants contest that one of skill in the art would consider the digital camera of Lin to be a "computing device" and also contest that merely performing a few "host-like" functions is sufficient to delineate a host computer.

In response to Appellants' prior remarks that a camera can perform some but not all of the functions required of host computer, the Examiner's Answer beginning at the second to last line of page 11 states, "Appellant has not set forth in the claim or the claim in light of the specification any such functions that would preclude the DSC of Lin from being a host computer." Claim 1 uses the term "host computer" and does not rely on functional language. The meaning of "host computer" as understood by one of ordinary skill in the art provides a patentable distinction over the cameras taught by Lin.

Accordingly, claim 1 distinguishes over the combination of Lin and Farago.

Independent claim 11 similarly distinguishes over the combination of Lin and Farago by reciting, "a controller that is of a type used in a printer cable that connects the

printer to a host computer during normal operation of the printer.

2.) Lin is not art that is analogous to Farago or Appellants' invention

Two separate tests define the scope of analogous prior art: (1) whether the art is from the same field of endeavor, regardless of the problem addressed and, (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved. See *In re Bigio* (Fed. Cir. 2004); *In Re In re Deminski*, 796 F.2d 436, 442 (Fed. Cir. 1986); and *In re Wood*, 599 F.2d 1032, 1036 (CCPA 1979).

Lin is not in the field of endeavor of Appellants' invention. The Examiner's answer broadly defines the field of endeavor of Lin and Farago to be "the printer art." However, this definition is overly broad for the first test for analogous art. For this test for analogous art, the PTO must determine the appropriate field of endeavor by reference to explanations of the invention's subject matter in the patent application, including the embodiments, function, and structure of the claimed invention. See *In re Wood*, 599 F.2d at 1036 (confining the field of endeavor to the scope explicitly specified in the background of the invention.) Appellants' specification defines the field of endeavor as demonstration of peripherals. For example, the title of the Application is "Point-of-Sale Demonstration of Computer Peripherals," claim 1 recites "a demonstration system," and the first line of Appellants' specification states, "A customer buying a computer peripheral such as a printer, a monitor, or a speaker system often wants to see a demonstration of the peripherals' capabilities." Lin is not in the field of endeavor of demonstration systems and therefore fails the first test for being analogous art as set forth in *In re Bigio*.

Lin is also not reasonably pertinent to the particular problem with which the inventors were involved. In particular, the inventors in the present application were involved with reducing the cost of designing and producing demonstration systems for peripherals. Prior demonstration systems require design and manufacture of custom systems that were produced in relatively small quantities and therefore at relatively high cost. Appellants solved this problem by giving a controller that is normally used in a cable for communication from a computer (and therefore produced in relatively large quantities) a demonstration mode for operation in a demonstration system. In contrast, Lin was involved in providing a way of printing images from a digital camera or a memory card taken from a digital camera. Lin is not reasonably pertinent to the problem with which the inventors were involved because there was no indication in Lin or otherwise at the time

the invention was made that camera technology was pertinent to demonstrating other peripherals.

Accordingly, Lin is not analogous art to Appellants' claimed invention or to the demonstration systems of Farago, and combining Lin and Farago as the Examiner suggests would not have been obvious to one of skill in the art at the time the invention was made.

B. Claims 7-9 are patentable under 35 U.S.C. 103(a) over Lin in view of Farago and further in view of Wett.

As indicated in the Appeal Brief, dependent claim 7 further distinguishes over the combination of Lin, Farago, and Wett by reciting, "the controller is operable in a first mode and a second mode, wherein in the first mode, the controller boots from an internal memory, and in the second mode, the controller boots from the external memory," and the combination of Lin, Farago, and Wett provides no indication or motivation for providing alternative boot modes for a controller in a demonstration system. The Examiner's Answer at page 13, line 16 indicates, "The motivation for doing so would have been to make the system [more] flexible and customizable." The Examiner's Answer at page 14, lines 19-21 also indicates that a second boot mode would be desirable for debugging. However, the combination of Lin, Farago, and Wett fails to suggest either of these motivations. For example, in Lin, controller 11 is intended for a specific system adapter 1. There is no indication from Lin or any combination of Lin, Farago, and Wett that additional boot mode flexibility is of any use in this system. Wett does describe a controller having internal and external boot capabilities but in a context unrelated to demonstration systems for peripherals.

For the above reasons and the reasons previously set forth in the Appeal Brief, Appellants request that the rejections of claims 1-15 be reversed.

Please contact the undersigned attorney at (408) 927-6700 if there are any questions concerning this Reply Brief or the application generally.

THE PATENT LAW OFFICES
OF DAVID MILLERS
6560 ASHFIELD COURT
SAN JOSE, CA 95120
PH: (408) 927-6700
FX: (408) 927-6701

EXPRESS MAIL LABEL NO:

EQ 236 998 765 US

Respectfully submitted,



David Millers
Reg. No. 37,396